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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,825	03/08/2004	Morteza Cyrus Afghahi	13435US04	2778

23446 7590 06/09/2009
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CHICAGO, IL 60661

EXAMINER

WELLS, KENNETH B

ART UNIT	PAPER NUMBER
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2816

MAIL DATE	DELIVERY MODE
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06/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/795,825

Applicant(s)

AFGHAHI ET AL.

Examiner

Kenneth B. Wells

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2009.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9 and 10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 9 and 10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 5/15/09 has been entered.

Drawings

2. The drawings are objected to because no figure is seen to support what is now recited in claim 9, i.e., sampling a voltage present at an input node a predetermined interval before measurement of the input signal is initiated. It appears that claim 9 is intended to read on instant Fig. 10, but this figure does not show such timing relationship, i.e., the measuring (comparing) of the input signal at node 1004 begins when node

1014 goes to logic "1", but this is simultaneous with the activation of the sampling circuit (when the two pass gate transistors turn on also in response to the control signal at node 1014 going high). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite because they are misdescriptive of the invention, i.e., as noted above in the drawing objection, what is recited in claims 9 and 10 is inconsistent with what is shown in the disclosed embodiments. Applicant should note MPEP 2173.03 which indicates that inconsistency between the claimed subject matter and the disclosure (i.e., specification and/or drawings) leads to confusion and indefiniteness of the claims. Claim 9 is also indefinite because the limitation set forth on the last 3 lines of the claim is inherently inconsistent, i.e., the claim recites that the sampling of the voltage at the input node occurs prior to the sampling of the input signal. However, the voltage present at the input node is the input signal, and thus to recite that the sampling of the voltage at the input node occurs after sampling of the input signal makes no sense.

As a minor point, the word "an" on line 7 should be changed to --the-- (because "an input signal" is already set forth on line 1 of claim 9).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Pilo et al, U.S. Patent No. 5,343,428.

As to claim 9, note Fig. 1 of Pilo et al, where the recited "sampling a voltage present at an input node" reads on the operation of turning on either transmission gate 43 or transmission gate 52 (the input node is the node which receives MUXLAT or MUXLAT*); the recited "holding the sampled voltage at a reference node as a reference voltage" reads on the operation of storing MUXLAT or MUXLAT* on capacitor 56 or 57 after the signal passes through its associated transmission gate; and the recited "sampling the input signal and comparing it to the

reference voltage" reads on the operation where signal MUXLAT is compared to MUXLAT* (or vice-versa) after the two signals have passed through the transmission gates and are then applied to the differential amplifier including BJTs 26 and 27. As to the recitation of "measuring an input signal using a single-ended sense amplifier" on lines 1-2, this is merely the intended use of the claimed method and, as such, cannot be relied upon to distinguish over Pilo et al (i.e., it is not one of the actual steps of the claimed method such as "sampling", "holding", "comparing", etc). Moreover, because the Pilo et al Fig. 1 circuitry is capable of receiving a single-ended input signal and comparing it with a reference voltage, this intended use recitation does not distinguish over Pilo et al.

As to claim 10, the recited "sampling circuit" reads on the combination of transmission gates 43 and 52 together with inverters 36, 37 and 38 and circuit 40.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Wells whose telephone number is (571)272-1757. The examiner

can normally be reached on Monday through Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan, can be reached at (571)272-1988. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kenneth B. Wells/
Primary Examiner
Art Unit 2816

May 27, 2009

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